1. INTRODUCTION

The M-38/US-45/M-64 Access Management Plan has been developed as a cooperative effort between the Michigan Department of Transportation, the Village of Ontonagon, and the Western Upper Peninsula Planning and Development Region (WUPPDR). This chapter will introduce the planning process and the basic principles of access management; following chapters will describe the corridor, identify issues and opportunities, and discuss recommended improvements to maximize safety and capacity of the corridor in light of possible future development.

Summary

The study corridor consists of the area within 1,000 feet of the centerlines of the existing state trunk lines (M-38, M64, US-45) within the Village of Ontonagon, as well as the area within 1,000 feet of the centerline of the new alignment of M-38 and M-64 following completion of the new bridge over the Ontonagon River.

The impetus for this access management plan resulted from MDOT's efforts to determine how best to address issues associated with the aging M-64 bridge across the Ontonagon River in the Village of Ontonagon. Ultimately, MDOT decided to replace the existing span with a new bridge located approximately 2,400 feet upriver. This new bridge will require a new highway corridor, and will result in significant changes in local traffic patterns. The access management study was initiated as a means of addressing issues related to traffic flow and safety along the existing state trunk lines, as well as maintaining traffic flow in the new stretches of roadway.

The Planning Process

A Corridor Study Team was formed, representing various governmental entities with jurisdiction over the corridor. The membership of the Corridor Study Team is listed in the Acknowledgements. This Study Team worked closely with the consultant, Wilcox Professional Services LLC, and sub-consultant, Community Consulting Services, to produce an access management plan which was responsive to local needs as well as being consistent with access management principles. MDOT provided substantial leadership, staff and financial assistance to the Study Team and worked closely with the consultant in the preparation of this Plan. Development of the plan took place during the 12-month period from October 1, 2005 until September 30, 2006.

Access Management

The two principal purposes of state trunk lines such as M-38, US-45 and M-64 are to: 1) provide a highway which maximizes driver safety and capacity, and 2) link communities along the route. If measures are not taken to preserve these functions, then one or both of these highway functions will be lost.

Local governments and land owners along a state trunk line often view the functions of the highway more narrowly. The opportunity for new economic development and the associated jobs and tax base often creates pressure to make hasty decisions regarding access changes. If these activities take place in a manner which does not consider the long-term integrity of the principal highway functions, then the investment that funding agencies, motorists, trucking firms and other users of the highway have made in the highway can be compromised. If capacity or traffic movement is severely impaired by congestion, or by local traffic access changes that undermine the through traffic function of the highway, then at some point the road may have to be expanded, or additional traffic routes, such as bypasses, must be developed. While these eventual solutions may improve traffic flow and safety, and make the roadway functional once more, there can be significant negative impacts on local communities. These impacts can include:

- Hazards to pedestrians and other non-motorized users at intersections and crossings.
- Decreased ease of access to businesses as traffic increases
- A loss of aesthetic quality as trees, lawns and landscaping give way to additional traffic lanes and/or new roadways
- Urban sprawl associated with a shifting of business development from old congested corridors to new (and at least for the time being) uncongested corridors.
- Expenses associated with planning, acquisition and development of new transportation corridors and/or widening or other improvements of existing corridors.

A mechanism is needed to balance national, state, regional, and local interests in a manner which protects the function of the highway as well as the existing and future investments in it, along with allowing reasonable economic development opportunities. This mechanism is the access management process.

The Michigan Department of Transportation publication entitled **Reducing Traffic Congestion and Improving Traffic Safety in Michigan Communities: The Access Management Guidebook** (Guidebook) defines access management as: *". . . a set of proven techniques that*

can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing road capacity and preserve investment in roads by managing the location, design and type of access to property." Within this plan there are several proposed improvements, both physical improvements and regulatory changes, which seek to balance what can at times be competing interests. This plan also represents the unique opportunity to address access management in a proactive manner along the new segments of the study corridor.

Traffic safety on roadways with inadequate spacing of driveways, poorly designed driveways, or improper sight distances for driveways can be improved through the use of appropriate access management techniques.

Roadways with congestion due to the presence of too many driveways or driveways located too close together can also be improved through various access management techniques. The purpose of this report is to study a few of these techniques and suggest ways in which they can be employed in this specific corridor.

New conflict points, such as driveways and intersections, can rapidly increase the crash rate along a corridor. This concept is illustrated in Figures 3-2, 3-3, 3-4 and 3-5 from the Guidebook (shown right).

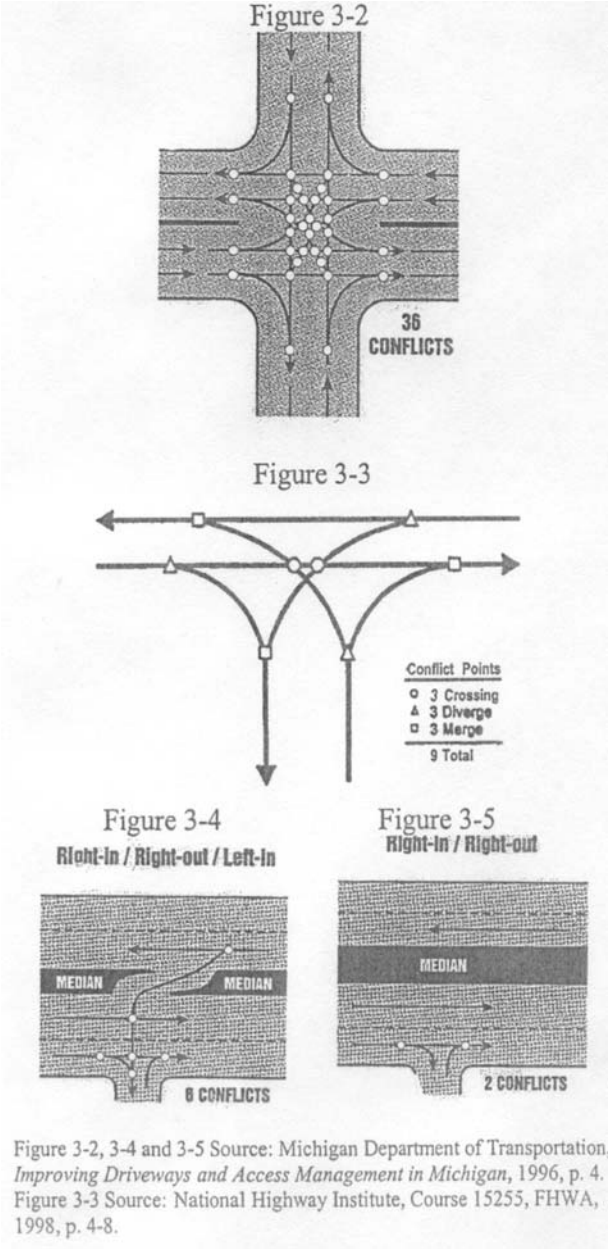


Figure 3-2, 3-4 and 3-5 Source: Michigan Department of Transportation, *Improving Driveways and Access Management in Michigan*, 1996, p. 4.
Figure 3-3 Source: National Highway Institute, Course 15255, FHWA, 1998, p. 4-8.

Remedial access management efforts can be accomplished through alternative driveway design and applied during site plan review for a parcel as it goes through the permitting process for changes in use, expansion, etc. While access management techniques can be applied to address existing problems, *the most effective time to implement access management techniques is when there are relatively few land uses accessing the roadway, or when new roadway improvements are being made.* Implementation of a coordinated site plan review process at this time can result in adoption of basic principles which will guide future decisions. Development of a coordinated site plan

review process will utilize a committee which will be familiar with access management principles and techniques, and will facilitate communication between permitting agencies.

Benefits of an Access Management Plan

An access management plan identifies both regulatory and physical changes which can improve traffic flow and safety. Examples of physical changes include driveway closures, driveway consolidations, parking lot improvements, and alternative means of access such as frontage roads and rear service roads. Examples of regulatory changes include zoning language regulating driveway spacing, lot width, etc., and a driveway permitting process that is combined with the zoning permit process and involves all affected entities.

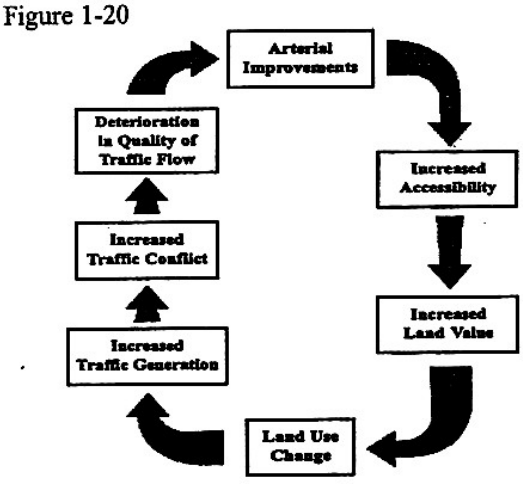
The **MDOT Access Management Guidebook** identifies the following five benefits of access management:

1. *Access management improves traffic safety and can prevent vehicular crashes.*
2. *Access management results in shorter travel times and reduces motorist costs.*
3. *Access management extends the function and capacity of roadways.*
4. *Access management improves access to property while enhancing the value of private land development.*
5. *Access management results in nicer communities.*

All these benefits are expected from implementation of this Plan.

Preventive access management actions are far easier and less expensive to implement than remedial actions. They preserve the function of the corridor and they provide added safety for motorists. If a community is able to put access management plans, review procedures and regulations in place before a corridor develops, then there is a good chance that when development does occur, the roadway function will be preserved, instead of a typical cycle of improve and expand (see Guidebook Figure 1-20, right). In this figure, increased development deteriorates the road capacity and safety due to numerous driveways and creates a seemingly endless cycle of road modifications linked to the new roadway conflict points. This is very costly for everyone in terms of both time and money.

Figure 1-20



The Transportation Land Use Cycle

Source: National Highway Institute, Course 15255, FHWA, 1998, p. 1-18.

For areas that are already developed, the focus is on remedial access management techniques. Remedial access management focuses on reducing congestion, improving safety and improving aesthetic conditions on arterials that have developed into the familiar strip pattern with

numerous separate driveways. Closing or consolidating driveways, sharing driveways, improving on-site circulation, linking adjoining parking lots, and constructing parallel access roads are common access management techniques applied in existing developed areas.

The most effective tool for implementing Access Management techniques in a community is first developing a coordinated site plan review process with an established site plan review committee. The coordinated site plan review committee contains representatives from various agencies and local units of government. All of these agencies require a site plan as part of their approval process. The coordinated process brings all the agencies together to perform the review as a unit. Preventative and remedial access management objectives are often achieved through a coordinated site plan review as property is proposed for development or redevelopment. Expansion of roadway capacity or simply reconstructing an existing road also present good opportunities to redefine access points, improve driveway entry and exit geometry along the corridor and to establish turning lanes where appropriate. **Older development may take a long time to retrofit, but if the local zoning ordinance requires access improvements as rehabilitation and redevelopment occurs, over time there will be improvement.**

The Coordinated Site Plan Review committee, by virtue of regular meetings, can develop action strategies and work with the Planning Commission to develop local zoning ordinance changes. This group will also act as an effective point of contact for MDOT and other governmental agencies as local road improvement monies become available. This group can help direct the improvements and determine the most effective use of right/left turn lanes and other access improvements in these projects. Safety Improvement Project Funds are often lost, for example, when local units of government are not ready to respond when the call for projects is made. A Coordinated Site Plan Review Committee can be instrumental in developing a “laundry list” of spot locations that can make effective use of Safety Improvement funds or other similar funding programs.

Another opportunity for the coordinated site plan review committee to act is as an advisory board if a series of traffic crashes creates a passionate call for action by the local community. Often the call for action includes the demand for a traffic signal or imposition of a lower speed limit. When this occurs, a well-trained, organized and effective corridor management team can spring to action and offer access management techniques which could provide quick low-cost solutions while a traffic signal or speed study is in progress.